

REMARKS

The Office Action dated March 16, 2005 has been carefully considered. Claims 1-27 are pending. The above amendments and the following remarks are presented in a sincere attempt to place this Application in condition for allowance. The Specification and Claims 1, 12, 14 and 16 have been amended and Claim 27 has been added in this Response. Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

An interview was held with the Examiner, Mr. Anh Q. Tra, on June 2, 2005, to discuss the rejections under 35 U.S.C. § 103(a) and the proposed amendments thereto. Applicants wish to thank the Examiner for his time and the courtesies extended.

The Specification stands objected to as not enabling. The Specification has been amended to describe, “the voltage across transistor 318 is insignificant compared to the voltage across capacitor 316, such that the voltage across capacitor 316 is substantially equal to the voltage across capacitor 304.” Therefore, the voltage across capacitor 304 does equal the voltage across capacitor 316 plus the voltage from drain to source across transistor 318. Support for this amendment can be found in FIGURE 3 of the original Application. Accordingly, Applicants respectfully request that the objection to the Specification be withdrawn.

Claims 1-11 and 16-26 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Claim 1 has been amended to describe a “second current mirror . . . that is at least configured to provide a potential difference across the scaled capacitor that is substantially equal to a potential difference across the leaky capacitor *minus the potential difference across the at least one second current mirror.*” Therefore, the potential difference across the leaky capacitor is substantially equal

to the potential difference across the scaled capacitor plus the potential difference across the second current mirror. Support for this amendment can be found in FIGURE 3 of the original Application. Claims 2-11 depend upon and further limit amended Claim 1. Accordingly, Applicants respectfully request that the rejections of Claims 1-11 under 35 U.S.C. § 112, first paragraph be withdrawn.

Claim 16 has been amended to describe a “second current mirror ... that is at least configured to provide a potential difference across the scaled capacitor that is substantially equal to a potential difference across the leaky capacitor *minus the potential difference across the at least one second current mirror.*” Therefore, the potential difference across the leaky capacitor is equal to the potential difference across the scaled capacitor plus the potential difference across the second current mirror. Support for this amendment can be found in FIGURE 3 of the original Application. Claims 17-26 depend upon and further limit amended Claim 16. Accordingly, Applicants respectfully request that the rejections of Claims 16-26 under 35 U.S.C. § 112, first paragraph be withdrawn.

Claims 14-15 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Support for the computer program product of Claims 14-15 can be found on page 5, lines 9-19 of the original Application. Accordingly, “all functions described herein may be performed in either hardware or software, or some combination thereof.” Accordingly, Applicants respectfully request that the rejections of Claims 14-15 under 35 U.S.C. § 112, second paragraph be withdrawn.

Claims 1-26 stand rejected under 35 U.S.C. § 103(a) in view of U.S. Patent 6,806,749 to Drusenthal (“Drusenthal”) and Alvarez, “Fundamental Circuit Analysis,” Science Research Ass.,

Inc. 1978, pgs. 378-79 (“Alvarez”). Insofar as these rejections may be applied against the amended claims, they are deemed overcome.

Claim 1 has been amended to clarify a distinguishing feature of the present invention. Amended Claim 1 describes “an apparatus for current leakage correction coupled to a leaky capacitor, *wherein the leaky capacitor is connected to ground.*” Support for this amendment can be found, among other places, FIG. 3 of the original Application.

The Drusenthal and Alvarez references do not teach, suggest, or disclose current leakage correction for a leaky capacitor connected to ground. Rather, Drusenthal discloses a circuit arrangement wherein a capacitor C2 can be implemented as a parallel combination of capacitors, wherein the largest capacitor is the leaky capacitor and the smallest capacitor is the scaled capacitor. As shown in FIG. 1a and 2-5 the leaky capacitor of Drusenthal is not connected to ground. Alvarez discloses that a capacitor can be made by a plurality of parallel connected capacitors having different sizes in order to meet a desired capacitance. The combination of these two references clearly deviates from the present invention, which discloses an apparatus for current leakage correction for a leaky capacitor that is connected to ground.

Ground connected capacitors are very common and account for the overwhelming majority of circuits which use capacitors. The ability of the present invention to accomplish leakage correction for the leaky capacitor is important because the ground connection is undisturbed. The present invention compensates for large leakage current in a capacitor due to a ground connection, whereas the combination of the Drusenthal and Alvarez references cannot compensate for a large leakage current. Accordingly, the Drusenthal and Alvarez references employ a displacement current effect which is ineffective at compensating a large leakage current.

In view of the foregoing, it is apparent that the cited references do not disclose, teach or suggest the unique combination now recited in amended Claim 1. Applicants therefore submit that amended Claim 1 is both clearly and precisely distinguishable over the cited references in a patentable sense. Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103(a) in view of Drusenthal and Alvarez be withdrawn and that amended Claim 1 be allowed.

Claims 2-11 depend upon and further limit amended Claim 1. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 2-11 also be withdrawn.

Claim 12 has been amended to clarify the same distinguishing feature of the present invention as amended Claim 1. Amended Claim 12 describes “a method for current leakage correction for a leaky capacitor, *wherein the leaky capacitor is connected to ground.*” Support for this amendment can be found, among other places, FIG. 3 of the original Application. Therefore, amended Claim 12 should be deemed to be distinguishable from the Drusenthal and Alvarez references for at least some of the aforementioned reasons that amended Claim 1 is distinguishable from the cited references. Specifically, the ability of the present invention to accomplish leakage correction for the leaky capacitor is important because the ground connection of the leaky capacitor is undisturbed. Accordingly, Applicants respectfully request that the rejections of Claim 12 under 35 U.S.C. § 103(a) in view of Drusenthal and Alvarez be withdrawn and that amended Claim 12 be allowed.

Claim 13 depends upon and further limits amended Claim 12. Hence, for at least the aforementioned reasons, this Claim should be deemed to be in condition for allowance.

Accordingly, Applicants respectfully request that the rejection of dependent Claim 13 also be withdrawn.

Claim 14 has been amended to clarify the same distinguishing feature of the present invention as amended Claim 1. Amended Claim 14 describes “a computer program product for current leakage correction for a leaky capacitor in a computer system, *wherein the leaky capacitor is connected to ground.*” Support for this amendment can be found, among other places, FIG. 3 of the original Application. Therefore, amended Claim 14 should be deemed to be distinguishable from the Drusenthal and Alvarez references for at least some of the aforementioned reasons that amended Claim 1 is distinguishable from the cited references. Specifically, the ability of the present invention to accomplish leakage correction for the leaky capacitor is important because the ground connection of the leaky capacitor is undisturbed. Accordingly, Applicants respectfully request that the rejections of Claim 14 under 35 U.S.C. § 103(a) in view of Drusenthal and Alvarez be withdrawn and that amended Claim 14 be allowed.

Claim 15 depends upon and further limits amended Claim 14. Hence, for at least the aforementioned reasons, this Claim should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejection of dependent Claim 15 also be withdrawn.

Claim 16 has been amended to clarify the same distinguishing feature of the present invention as amended Claim 1. Amended Claim 16 describes “a circuit for current leakage correction coupled to a leaky capacitor, *wherein the leaky capacitor is connected to ground.*” Support for this amendment can be found, among other places, FIG. 3 of the original Application. Therefore, amended Claim 16 should be deemed to be distinguishable from the Drusenthal and Alvarez references for at least some of the aforementioned reasons that amended Claim 1 is

distinguishable from the cited references. Specifically, the ability of the present invention to accomplish leakage correction for the leaky capacitor is important because the ground connection of the leaky capacitor is undisturbed. Accordingly, Applicants respectfully request that the rejections of Claim 16 under 35 U.S.C. § 103(a) in view of Drusenthal and Alvarez be withdrawn and that amended Claim 16 be allowed.

Claims 17-26 depend upon and further limit amended Claim 16. Hence, for at least the aforementioned reasons, these Claims should be deemed to be in condition for allowance. Accordingly, Applicants respectfully request that the rejections of dependent Claims 17-26 also be withdrawn.

Claim 27 is a new claim that has been added in this Response. Support for Claim 27 can be found, among other places, FIG. 3 of the original Application. Applicants have now made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-27.

Applicants enclose a check in the amount of \$250.00 in payment of the fees due under 37 C.F.R. § 1.16(h) for an additional claim in excess of three, and 37 C.F.R. § 1.16(i) for an additional claim in excess of 20. Applicants do not believe that any other fees are due; however, in the event that any other fees are due, the Commissioner is hereby authorized to charge any required fees due (other than issue fees), and to credit any overpayment made, in connection with the filing of this paper to Deposit Account No. 50-0605 of CARR LLP.

Should the Examiner deem that any further amendment is desirable to place this application in condition for allowance, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,

CARR LLP



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